Center of mass and its relation with speed of light and strong nuclear energy

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Published by : Self

Abstract:

Neutrinos can go at the speed of light. This fact arises a question, "Is it possible for a particle containing mass to go at or to achieve the speed of light?"

Another unsolved problem of modern physics is the source of strong nuclear energy.

Exact shape of the center of mass is also unknown to us.

I tried to identify the area of the center of mass and with that I tried to solve the problem of the mass of photon and the source of strong nuclear energy.

Keywords: Center of mass, speed of light, strong nuclear energy.

Contents:

[1]

Center of mass and its relation with speed of light :

Every particle has a center of mass. We generally consider that center as a geometric point. The exact shape of the center of mass is a question.

We also know that according to the theory of relativity no particle having mass can achieve the speed of light. For that reason,we assume that the rest mass of a photon is zero.According to the special relativity:

M=Mo/√1-V^2/C^2. where "M" is the mass at "V" speed and "Mo" is the rest mass and "C" is the speed of light.

This equation says that if Mo>0, the particle cannot go at the speed of light. Now, imagine that Mo=0

That means M=0/√1-V^2/C^2=0

It means that a particle of 0(zero) mass cannot produce mass even at the speed of light.

Moreover, neutrino particle has mass and can obtain the speed of light.

To solve this problem I want to propose:

1. The radius of Compton wave length of a particle is the radius of its center of mass.Gravitation can't play action at/inside this radius.

For example:

Let, a particle containing mass M has Compton wave length λ.

Then, hen,

the radius of the Compton wave length =λ/2Π

So, the radius of the center of mass =Rc=λ/2Π=h/2ΠMC , where h=Planck's constant and C , where h=Planck's constant and C=speed of light.

Inside this radius Rc gravitational energy is zero.

2. a) When the particle's radius is same to its Compton wave length radius, and

the gravitational energy at that radius according to Newton's law < mass ×square of the speed of light, then the particle moves at the light speed.

For example:

Let, a particle of R radius containing mass M has Compton wave length λ and Compton wave length radius λ/2Π.

If we consider the mass M as two equal parts, its own gravitational energy according to Newton's low of gravitation,

E=G×0.5M×0.5M/R=GM^2/4R, where G is the gravitational constant.

When,

R=λ/2Π

then,

E=GΠM^2/2λ

When,

GΠM^2/2Π < MC^2

then the particle will move at the speed of light.

b) When the particle's radius is same to its Compton wave length radius, and the gravitational energy at that radius according to Newton's law > mass×square of the light speed, then the particle bangs.

Mathematically:

when

GΠM^2/2Π > MC , where h=Planck's constant and C^2

then the particle bangs.

New born particles follow the characteristics of the particle described in (a).

3. Charge containing particle can't go at the speed of light. Charge restricts the wave property of a particle. An opposite charge removes that restriction property (against wave property) of a charge pertially or totally depending on distance.

If we consider my proposals correct, we can say that photon is at zero mass at its radius but shows gravitational property outside that radius.

[2]

Center of mass and its relation with strong nuclear energy:

In the nucleus of an atom protons and neutrons are bonded with strong nuclear energy. About the source of this energy I have a proposal.

I want to propose:

A particle containing mass"M" with "R" radius, λ Compton wave length and λ/2Π wave length radius will have a tendency to radiate energy which it contains in its center of mass. That energy E=M C^2 λ /2ΠR=hC/2ΠR where "C" is the speed of light and "h" is the Planks constant.

Gravitational energy restricts this radiation.

In nucleus a proton exchanges that type of energy with proton or neutron and that forms the strong nuclear bond.

Now,

strong nuclear energy=hc/2ΠR-gravitational energy-repulsive electric energy where R is the radius of proton or neutron.

[3]

Conclusion:

These proposals solve the problem of the speed of light of particles containing mass and also hints the source of nuclear energy by defining the center of mass.

I hope that these proposals will be able to solve more problems related to Black Hole radiation, Big Bang and nuclear physics. These proposals are theoretical

only. Practical experiments are required.

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